EXHIBIT E

4 OF 6

THE SCOPE AND CONTENT OF THE PRIOR ART

Under the patent laws, a person is entitled to a patent only if the invention claimed in the patent is new and unobvious in light of what came before. That which came before is called "prior art." The Doyle and RIMS patents are prior art. Determining the scope and content of the prior art means that you should determine what is disclosed in the prior art relied on by Ariba. You must decide whether this prior art was reasonably relevant to the particular problem the inventor faced in making the invention covered by the patent claims. Such relevant prior art includes prior art in the field of the invention, and also prior art from other fields that a person of ordinary skill would look to when attempting to solve the problem.

OBVIOUSNESS

As I mentioned earlier, an inventor is not entitled to a patent if his or her invention would have been obvious to a person of ordinary skill in the field of the invention at the time the invention was made.

Unlike anticipation, obviousness may be shown by considering more than one item of prior art. The two pieces of prior art upon which Ariba relies are the RIMS patent, Exhibit #DX115, and the Doyle patent, Exhibit #DX128. The question is, would it have been obvious for a skilled person who knew of this prior art to make the claimed invention? If the answer to that question is yes, then the patent claims are invalid.

Ariba contends that the inventions claimed in claims 1, 14 and 31 of the '683 patent, claim 21 of the '516 patent, and claim 5 of the '172 patent would have been obvious to a person of ordinary skill in the field of the invention at the time the invention was made in light of the RIMS item of prior art combined with the Doyle item of prior art. If you find that Ariba has proved obviousness by clear and convincing evidence, then you must find that the claims are invalid for obviousness.

Obviousness is determined from the perspective of a person of ordinary skill in the field of the invention. The issue is not whether the claimed invention would have been obvious to you, to me as a judge, or to a genius in the field of the invention. Rather, the question is whether or not the invention would have been obvious to a person of ordinary skill in the field of the invention.

In deciding obviousness, you must avoid using hindsight; that is, you should not consider what is known today or what was learned from the teachings of the patent. You should not use the patent as a road map for selecting and combining items of prior art. You must put yourself in the place of a person of ordinary skill at the time the invention was made.

You must also keep in mind that the test for obviousness is not whether or not it would have been obvious to try to make the invention, but rather whether or not the invention would have been obvious to a person of ordinary skill in the inventor's field at the time the invention was made.

42

In determining whether or not these claims would have been obvious, you should make the following determinations:

First, what is the scope and content of the prior art?

Second, what differences, if any, are there between the invention of the claims of the patent and the prior art?

Third, what was the level of ordinary skill in the art at the time the invention was made?

Fourth, are there any objective indications of non-obviousness?

Against this background, you must decide whether or not the invention covered by the patent claims would have been obvious.

I will now describe in more detail the specific determinations you must make in deciding whether or not the claimed invention would have been obvious.

43

DIFFERENCES BETWEEN THE INVENTION OF THE CLAIMS AND THE PRIOR ART

In determining the differences between the invention covered by the patent claims and the prior art, you should not look at the individual differences in isolation. You must consider the claimed invention as a whole and determine whether or not it would have been obvious in light of all of the prior art.

In deciding whether to combine what is described in various items of prior art, you should keep in mind that there must be some motivation or suggestion for a skilled person to make the combination covered by the patent claims. You should also consider whether or not the prior art "teaches away" from the invention covered by the patent claims. The question to be answered is: Would someone reading the prior art be discouraged from following the path taken by the inventor?

44

LEVEL OF ORDINARY SKILL

Obviousness is determined from the perspective of a person of ordinary skill in the art. This person is presumed to know all of the prior art, not just what the inventor may have known. When faced with a problem, this ordinary skilled person is able to apply his or her experience and ability to the problem and also to look to any available prior art to help solve the problem.

Factors to consider in determining the level of ordinary skill in the art include the educational level and experience of people working in the field, the types of problems faced by workers in the art and the solutions found to those problems, and the sophistication of the technology in the field.

OBJECTIVE INDICATIONS CONCERNING OBVIOUSNESS

You also must consider what are referred to as objective indications of non-obviousness. Some of these indications of non-obviousness are:

1. Commercial success of products covered by the patent claims or made by a process covered by the patent claims.

2. A long-felt need for the invention.

3. Failed attempts by others to make the invention.

4. Copying of the invention by others in the field.

5. Praise of the invention by the infringer or others in the field.

The presence of any of these objective indications may suggest that the invention was not obvious. These objective indications are only relevant to obviousness if there is a connection, or nexus, between them and the invention covered by the patent claims. For example, commercial success is relevant to obviousness only if the success of the product is related to a feature of the patent claims. If the commercial success is the result of something else, such as innovative marketing, and not to a patented feature, then you should not consider it to be an indication of non-obviousness.

46

Verdict - Election of Foreperson--Duty to Deliberate--Unanimity--Punishment--Form of Verdict--Communication with the Court (Civil)

Upon retiring to your jury room to begin your deliberation, you will elect one of your members to act as your foreperson. The foreperson will preside over your deliberations and will be your spokesperson here in court.

Your verdict must represent the collective judgment of the jury. In order to return a verdict, it is necessary that each juror agree to it. Your verdict, in other words, must be unanimous.

It is your duty as jurors to consult with one another and to deliberate with one another with a view towards reaching an agreement if you can do so without violence to individual judgment. Each of you must decide the case for himself and herself, but do so only after an impartial consideration of the evidence in the case with your fellow jurors. In the course of your deliberations, do not hesitate to reexamine your own views and to change your opinion if convinced it is erroneous. Do not surrender your honest conviction, however, solely because of the opinion of your fellow jurors or for the mere purpose of returning a verdict.

Remember at all times that you are not partisans. You are judges--judges of the facts of this case. Your sole interest is to seek the truth from the

47

evidence received during the trial.

Your verdict must be based solely upon the evidence received in the case. Nothing you have seen or read outside of court may be considered. Nothing that I have said or done during the course of this trial is intended in any way, to somehow suggest to you what I think your verdict should be.

A Special Verdict form has been prepared for your convenience. On that form you will record your decisions. Nothing said in the instructions and nothing in the Special Verdict form is to suggest or convey to you in any way or manner any intimation as to what verdict I think you should return. What the verdict shall be is the exclusive duty and responsibility of the jury. As I have told you many times, you are the sole judges of the facts.

You will take [this] verdict form to the jury room and, when you have reached unanimous agreement as to your verdicts, you will have your foreperson write your verdict, date and sign the form, and then return with your verdict to the courtroom.

If it becomes necessary during your deliberations to communicate with the Court, you should send a note, signed and dated by your foreperson or by one or more members of the jury, through the court security officer. No member of the jury should ever attempt to communicate with the Court by any

48

means other than a signed writing and the Court will never communicate with any member of the jury on any subject touching the merits of the case other than in writing or orally here in open court.

Bear in mind also that you are never to reveal to any person--not even to the Court--how the jury stands, numerically or otherwise, on the question of whether or not ~~the government~~ has sustained its burden of proof until after you have reached a unanimous verdict.

49

Page 180

```
 1
 2            IN THE UNITED STATES DISTRICT COURT
 2           FOR THE EASTERN DISTRICT OF VIRGINIA
 3                      RICHMOND DIVISION
 3
 4    - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 4
 5    ePLUS, INC.,
 5
 6
 6                                Plaintiff;
 7
 7        v.                              CIVIL ACTION
 8                                         3:05CV281
 8    SAP AMERICA, INC., et al.
 9
 9
10                                Defendants.
10
11    - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
11                     JURY TRIAL - VOLUME II
12
12                      March 29, 2006
13                      Richmond, Virginia
13                         9:30 a.m.
14
14                       AND A JURY
15
15    BEFORE:        HONORABLE JAMES R. SPENCER
16                   United States District Judge
16
17
17    APPEARANCES:   JENNIFER A. ALBERT, ESQ.
18                   THOMAS J. CAWLEY, ESQ.
18                   MAYA M. ECKSTEIN, ESQ.
19                   SCOTT L. ROBERTSON, ESQ.
19
20                                Counsel for Plaintiff;
20
21                   LLOYD R. DAY, JR., ESQ.
21                   ROBERT GALVIN, ESQ.
22                   DABNEY J. CARR, IV, ESQ.
22                   ROBERT A. ANGLE, ESQ.
23
23                                Counsel for Defendants.
24
24                      JEFFREY B. KULL
25                   OFFICIAL COURT REPORTER
      25
```

Page 193

1   about that process, how you applied for and obtained
2   these patents?
3   A   Well, actually, I think the initiation for the
4   patent came from our senior management at Fisher
5   Scientific. I feel they recognized as we were
6   discussing what we were building and designing that
7   they felt there was a real need that was a very novel
8   and unique product. So they had engaged one of their
9   corporate patent attorneys to interview the inventors,
10   myself, Jim Johnson, and Bob Kinross.
11   Q   Did Fisher Scientific have in-house patent
12   counsel?
13   A   Yes.
14   Q   What was his name?
15   A   Alan Doernberg.
16   Q   And did you in fact meet with Mr. Doernberg?
17   A   We met quite a few times through the course of the
18   development of the patent. The process would be
19   initially we had interviews with Alan and we would give
20   him whatever information we had, design documents, as
21   well as communicate verbally information to him and he
22   would take that information, put together a draft of
23   the patent, come back to us and ask us to read it and
24   say, "Is that what you built or invented?" We would
25   have input back and it would be an ongoing process

Page 194

1   until it was complete.
2   Q   So you reviewed drafts of the application?
3   A   Yes.
4   Q   Approximately how many drafts did you review?
5   A   Oh, maybe a dozen.
6   Q   And could you tell us, did you make efforts to
7   make sure that the drafts were complete with respect to
8   what your invention consisted of?
9   A   Yes. I will have to admit that reading legalese
10   can be difficult to go through.
11   Q   You are familiar with what are called these claims
12   at the back of the patent?
13   A   Yes.
14   Q   All right. Now, did you or the other inventors
15   draft the claims?
16   A   No. None of us did. It was done by the patent
17   attorney.
18   Q   Did you understand that that was the process?
19   A   Yes.
20   Q   You are not a patent attorney?
21   A   No.
22   Q   Okay. But did you review those original claims as
23   drafted?
24   A   Yes.
25   Q   And did they comport with what you understood the

Page 195

1   scope and nature of your invention to be?
2   A   Yes, they did.
3   Q   And without revealing any attorney/client
4   communications between you and your patent attorney,
5   did you provide your patent attorney with any
6   information as to existing systems that you were aware
7   of at the time that were in the market in 1994?
8   A   Yes.
9   Q   Did Fisher Scientific ultimately develop a product
10   that was based on your invention?
11   A   Yes. The initial product that was developed based
12   on that invention would have been called the
13   SupplyLink.
14   Q   SupplyLink.
15   A   Two words jammed together.
16   Q   And can you tell me approximately when Fisher
17   Scientific developed this product known as SupplyLink?
18   A   We would have had the product developed at the
19   very end of 1994 and started to sell it in 1995, early
20   part of 1995.
21   Q   You discussed a number of the features or
22   attributes of this electronic sourcing system.
23   A   Yes.
24   Q   Did the SupplyLink product have those features or
25   attributes?

Page 196

1   A   Yes, it did.
2   Q   Did it have this Graphical User Interface that
3   would make it user friendly to the end-user?
4   A   Yes. It did.
5   Q   And we talked a little bit about some technical
6   issues yesterday about a distributed network or a
7   network architecture. Can you tell us, was this
8   SupplyLink product distributed in the sense that
9   customers could access it remotely and obtain
10   information over a network?
11   A   Yes. The applications, client/server application,
12   meaning that you could log on remotely to the system,
13   enter the information locally, and it would communicate
14   the programs that were running on a server.
15   Q   Can you in your exhibit notebook, sir, please take
16   a look at what's been marked as Defendant's Exhibit 805
17   and tell me if you recognize that document.
18   A   Yes. That document is called a technical bulletin
19   that was produced that would be given to those
20   individuals who would be responsible for installing a
21   SupplyLink application at a customer's site. We would
22   provide information concerning the architecture of the
23   system and how it was constructed.
24   Q   Okay. It indicates on the cover first quarter of
25   1996. Could you tell us what time period you believe

Page 197

1 that would be? Is that the first three months of
2 1996?
3 A Yes.
4 Q Do you have an understanding as to whether or not
5 this brochure had been published as of that time?
6 A Yes, it would have been.
7 Q Going to Page 3 of Exhibit 805, there is an
8 introduction there, and if we could blow up those first
9 three paragraphs and tell me if this description here
10 is consistent with your understanding of the invention
11 that you have just provided the high level overview for
12 the jury.
13 (Witness perusing document.)
14 A Yes.
15 Q Was it developed in response to your customer
16 needs?
17 A Yes. I think if you -- yes, it was developed in
18 response to customer needs. If you think about some of
19 the things we were trying to solve, I think we have
20 addressed those.
21 Q Does it discuss the multiple vendor catalogs?
22 A It would have the simple and unique combination to
23 supply graphical product information drawn from
24 multiple vendors' catalogs. It uses a unique
25 combination of advanced technologies to supply

Page 198

1 graphical product information drawn from multiple
2 vendors' catalogs. It is a simple, intuitive
3 requisition screen; provides requisition entry for
4 processing through either an existing purchasing system
5 or directly to the vendors.
6 Q Go to Page 7 of that document, Exhibit 805, and
7 the first two paragraphs under the SupplyLink
8 platforms. Look at that for me. Tell me, what is this
9 technical bulletin disclosing here?
10 A There it is saying, it is defining the type of
11 server that you can deploy our application on where it
12 says, "The client is connected to an OS/2."
13 Q Explain to the jury what a server is.
14 A A server is a computer that houses on it programs
15 or data that the client component that's running on a
16 remote PC interacts with. So the actual programs are
17 running on the server as well as the data. You can
18 access the data that's running on the server as well.
19 I think this says that there's three different
20 operating systems that the server can be run under.
21 Q What's an operating system?
22 A Operating system is a program that runs in the
23 computer that instructs the computer what to do, tells
24 it -- it will tell it what programs to start up. It
25 will tell it where a print drive is. It will tell it

Page 199

1 where the database is. It will tell it, schedule tasks
2 within the computer itself.
3 Q Can you tell us, is this describing alternative
4 ways that this invention can be implemented?
5 A Yes. It says that you can run this SupplyLink
6 system on three separate types of servers.
7 Q And what is meant in the second paragraph here
8 about this local area network. Explain what that is.
9 A It is what would connect the PC's, the computers
10 at the desktop, the customers, with the server. It
11 would be a local area network. So PC's would be
12 sitting there and you would be getting on your PC the
13 screens, the user interface. You would be getting a
14 catalog there. And then you would be communicating
15 over the network to the server and the server then
16 would take that information and do certain business
17 logic and then update the database.
18 Q You say business logic. Are there programs that
19 are running on this server that permit the end-user at
20 the PC to use your invention?
21 A Yes. Yes, there are.
22 Q What were those types of programs?
23 A Oh, programs like updating the inventory record,
24 building the purchase order, maintaining the
25 requisition, storing information into the database.

Page 200

1 Q How about searching catalogs?
2 A Searching catalogs. The catalogs themselves are
3 on the server. The searching in the embodiment would
4 be running on the local PC.
5 Q Okay. Is there a presentation layer that's
6 displayed on the local computer?
7 A Yes.
8 Q What's a presentation layer?
9 A That's what you are looking at. It is when you
10 are writing up a program, it is what you interact with
11 when you are entering information.
12 Q At the bottom of this Page 7, it goes over to the
13 top of Page 8, there is a description of this computer
14 that you call the server requirements. And
15 specifically, the last sentence indicates UNIX server
16 applications. Do you see that?
17 A No.
18 Q Last sentence on Page 7 and over to the top of
19 Page 8, the first two paragraphs. If you want to put
20 that together for me, Mike. Thank you. What's this
21 technical bulletin indicating here with respect to the
22 UNIX server applications that's discussed here going
23 down right to the next sentence?
24 A All right. The UNIX server applications, there's
25 two different references. There is a reference to the

Page 357

1   to complete this electronic sourcing project?
2   A   From the time we started the design until we
3   finished, probably anywhere between, I would say, ten
4   to twelve months.
5   Q   Did you come up with a commercial product?
6   A   Yes, we did.
7   Q   And was that product known as SupplyLink?
8   A   Yes.
9   Q   Did there come a time when you got involved in the
10 patenting process with respect to this product?
11 A   Yes, I did.
12 Q   Was there in-house counsel at Fisher Scientific?
13 A   Yes, there was.
14 Q   His name is Mr. Doernberg?
15 A   Alan Doernberg, yes.
16 Q   Did you meet with Mr. Doernberg with respect to
17 the patent?
18 A   Numerous occasions.
19 Q   Did you review draft patent applications?
20 A   Yes.
21 Q   What did you do to assure yourself that the
22 applications were complete and thorough that you were
23 going to be filing with the Patent Office?
24 A   During those meetings we would spend a great deal
25 of time kind of explaining what we were trying to

Page 358

1   accomplish and Doug and Bob and Frank and I would
2   review those documents together and interpret what
3   those documents were saying to match what our
4   requirements were.
5   Q   Did you make every effort to try and be as
6   complete and thorough as possible in your disclosure?
7   A   We spent many hours and many days reviewing that
8   document.
9   Q   This project, electronic sourcing project that you
10 believe started sometime in the summer of 1993, carried
11 on for 12 to 14 months, I think you said. Did you work
12 on this sporadically or work on this during the entire
13 time?
14 A   No, this was pretty much a dedicated project for
15 us.
16 Q   Did you ever abandon the project?
17 A   No.
18 Q   Did I understand you to say you reviewed drafts of
19 the patent application before it was submitted to the
20 Patent Office?
21 A   Yes.
22 Q   Did you write the specification, write the patent
23 application?
24 A   No, I did not.
25 Q   Did you draft the claims?

Page 359

1   A   No, I did not write the claims.
2   Q   Could we just take a look at Figure 1-B of the
3   '683 patent again? And what aspects of Figure 1-B do
4   you feel you made the inventive contribution to the
5   overall invention that's claimed and disclosed in this
6   patent?
7   A   Well, that would be the complete requisitioning
8   process that ran on the server. I also worked on the
9   requisitioning and purchasing program for the Graphical
10 User Interface that ran on the Workstation.
11 Q   And could you identify for us what box elements
12 that you were referring to there? Did you work on, for
13 example, in Figure 1-B, the 242 box? I'm sorry, it has
14 already been highlighted for us.
15 A   That would be the complete requisition running on
16 the server 200.
17 Q   Are you familiar with some of the network or
18 communication protocols that are disclosed in the
19 patent?
20 A   Yes.
21 Q   Let me reference you to Column 17 of the '683
22 patent, if I could.
23 A   '683?
24 Q   '683. It should be the first exhibit in your
25 notebook.

Page 360

1   A   Okay.
2   Q   Starting about Line 19 where it begins "Server
3   200" down to the end of that sentence. Do you see
4   that?
5   A   Column 18 --
6   Q   Column 17, Line 19 through, I think, 22 probably.
7   A   Yes.
8   Q   Okay.
9   A   "The server 200 maintains complete requisitions
10 242 in a manner similar to the manner in which local
11 computer maintains the requisition databases 42 in the
12 embodiment shown in Figure 1-A."
13 Q   Explain to the jury what you understand that
14 passage to indicate.
15 A   If you look at the diagram that you had up there.
16 Q   Go back to it, Figure 1-B.
17 A   1-B, yes. What that means is that the code that
18 you have running on the local computer that we had
19 described, which was the business logic, could also run
20 on the server, which would be the complete
21 requisitioning process. So what we did is we broke up
22 all the business objects and ordered them up so they
23 could run on the server. We replaced all the Green
24 Screens, as I'll call it, with the Graphical User
25 Interface that actually ran on the Workstation.

46 (Pages 357 to 360)

Page 361

1   Q   So what's running on the local computer then?

2   A   What's running on the local computer is the

3   Graphical User Interface that the end-user or customer

4   would see.

5   Q   What's running on the server as part of that

6   application?

7   A   The business objects that would be considered to

8   be the log-on security checks, the requisition header,

9   the database updates, the item maintenance, and all the

10 purchase ordering approval process.

11 Q   Now, does the '683 patent of which you are an

12 inventor also reference your RIMS patent?

13 A   Yes, it does.

14 Q   Why don't you refer to Column 1 and see if you can

15 identify it there.

16 A   Of the '683?

17 Q   Yes. About Line 14, 15.

18 A   Okay. The Fisher Scientific Requisition and

19 Inventory System, Fisher RIMS.

20 Q   Yes. Referencing the disclosure here, do you see

21 that? If I can read it, it says, "United States Patent

22 5712989 filed April 2nd, 1993 and assigned to Fisher

23 Scientific Company of Pittsburgh, PA. The disclosure

24 of which is incorporated herein by reference.

25 A   Yes.

Page 362

1   Q   Let me just reference you to your book again. It

2   is at Plaintiff's Exhibit 116.

3   A   Tab 116?

4   Q   Yes. It should have your RIMS patent.

5   A   Okay.

6   Q   Are you with me?

7   A   Yes.

8   Q   Okay. You are familiar with this patent,

9   correct?

10 A   Yes.

11 Q   And you have reviewed it in detail in the past?

12 A   At the time we filed this patent, yes, we went

13 through a number of reviews.

14 Q   And had you had occasion to go back recently and

15 look at it?

16 A   Briefly.

17 Q   Why don't we look at Column 4 starting at Line 4,

18 going down to about Line 14. In fact, you might be

19 able to see it on your computer monitor better.

20 A   Okay.

21 Q   Okay. Why don't you just read that passage to

22 yourself, if you could for a second. Tell us when you

23 are done.

24 A   Okay.

25 Q   This local computer they are talking about, is

Page 363

1   that the local computer that was part of the RIMS

2   system?

3   A   Yes.

4   Q   What is this LU.6.2 communications protocol

5   available from IBM?

6   A   LU.6.2 was a communications protocol that IBM had

7   available that allowed inter-system communication

8   between computers.

9   Q   Just looking back at the cover of this patent, the

10 cover page again, it was filed in April of 1993; is

11 that correct? Go back to the first page of it.

12 A   Yes. April 2nd.

13 Q   So in 1993 were you aware of that communication

14 protocol?

15 A   Yes.

16 Q   And was that communication protocol employed in

17 your RIMS patent?

18 A   Yes, it was.

19 Q   Would one of skill in the art understand that

20 that's the type of communication protocol that could be

21 used in a requisition system to communicate between

22 computers and programs?

23 A   Yes.

24 Q   Let's go back to the '683 if we could just for a

25 second. Specifically, Column 17. I'm sorry, at lines

Page 364

1   -- starting at Line 6. It begins "In this

2   environment." It goes down through "local computer

3   200."

4   A   Yes.

5   Q   I think it is blown up on your monitor. This

6   states in your '683 patent, "In this environment, file

7   server 1200 is a large personal computer, a

8   Workstation, or a minicomputer such as an IBM AS/400.

9   First, just refresh us on what a file server is.

10 A   File server, I guess in today's technology, is the

11 server that holds files and folders that can be

12 retrieved and stored information from in a networked

13 environment.

14 Q   The IBM AS/400, do you know what AS stands for?

15 A   I believe that's Application Server.

16 Q   What is an Application Server? What can it do?

17 A   It is a mid-range computer that allows for

18 applications to run in a multi-tiered environment.

19 Q   Is that something that you incorporate into your

20 system?

21 A   Yes. We had a client Workstation connected to the

22 server and then we could also connect to a vendor's

23 host computer as well. There was application logic

24 running in all three of those environments.

25 Q   Okay, thank you. I have no further questions.

```
 1
 2              IN THE UNITED STATES DISTRICT COURT
 2           FOR THE EASTERN DISTRICT OF VIRGINIA
 3                      RICHMOND DIVISION
 3
 4     --------------------------------------
 4
 5   ePLUS, INC.,
 5
 6
 6                         Plaintiff;
 7
 7       v.                          CIVIL ACTION
 8                                    3:05CV281
 8   SAP AMERICA, INC., et al.
 9
 9
10                        Defendants.
10
11     --------------------------------------
11                JURY TRIAL - VOLUME VIII
12
12                     April 10, 2006
13                    Richmond, Virginia
13                       9:30 a.m.
14
14
15   BEFORE:       HONORABLE JAMES R. SPENCER
15                 United States District Judge
16                        AND A JURY
16
17
17   APPEARANCES:  JENNIFER A. ALBERT, ESQ.
18                 THOMAS J. CAWLEY, ESQ.
18                 MAYA M. ECKSTEIN, ESQ.
19                 SCOTT L. ROBERTSON, ESQ.
19
20                          Counsel for Plaintiff;
20
21                 LLOYD R. DAY, JR., ESQ.
21                 ROBERT GALVIN, ESQ.
22                 DABNEY J. CARR, IV, ESQ.
22                 ROBERT A. ANGLE, ESQ.
23
23                          Counsel for Defendants.
24
24
25                 JEFFREY B. KULL
     25            OFFICIAL COURT REPORTER
```

Page 1371

1 a computer system. And the method claims have to do
2 with a business process.
3   Q Okay. Now, in your opinion, is that
4 difference significant with respect to the issues
5 you've been asked to consider?
6   A No, it is not.
7   Q Why not?
8   A Well, it is not because the answers to the
9 questions that I was posed don't change if, you know,
10 regardless of one or the other. So I would arrive to
11 the same conclusion essentially.
12   Q In the contention of the '683 method claims,
13 what in your opinion is the relevant field of art?
14   A The relevant field of art is methods for
15 electronic sourcing. So the methods have to do with
16 what are the business processes and steps to do
17 electronic purchase and procurement.
18   Q And what in your opinion would be the level
19 of ordinary skill in that field of electronic
20 purchasing as of August 1994?
21   A Well, it would be a purchasing professional
22 with an undergrad business degree and with experience
23 in using computers for the purpose of designing and
24 using such electronic sourcing systems.
25   Q Okay. In the context of the '516 system

Page 1372

1 claims, what in your opinion is the relevant field of
2 art?
3   A It is computer science.
4   Q And what in your opinion would be the level
5 of ordinary skill in the fields of computer science as
6 of August 1994?
7   A Well, that would be a person with a
8 bachelor's degree in computer science, maybe three to
9 five years of experience, in designing and programming
10 systems for electronic procurement.
11   Q Okay. Now, are you aware that ePlus's
12 expert, Dr. Weaver, has offered the opinion that the
13 level of one of ordinary skill in the art would be a
14 person with a bachelors of science degree in computer
15 science or equivalent with respect to both sets of
16 claims, and this person would have one or two years of
17 practical programming experience and an understanding
18 of basic principles of supply chain management and
19 procurement. Are you aware he's testified to that?
20   A Yes. I am aware of that.
21   Q Do you agree or disagree with Dr. Weaver's
22 opinion?
23   A I disagree.
24   Q Why?
25   A Because, as I just mentioned, there are two

Page 1373

1 types of claims, the system claims and the method
2 claims. And, as Mr. Robertson said in his opening
3 statements, each claim is a different invention. So if
4 you had inventions that have to do with a computer
5 system, then the person of ordinary skill in the art
6 would be different from a person of ordinary skill in
7 the art with respect to business method claim. That's
8 why I disagree with that opinion.
9   Q In your opinion, does your difference with
10 Dr. Weaver matter in this case?
11   A No. It doesn't matter in this case.
12   Q Why?
13   A Well, it doesn't matter because actually both
14 of us recognize that a person of ordinary skill in the
15 art would really have to have a familiarity with
16 computer systems, business processes for electronic
17 procurements. In that sense, I don't think it would
18 matter.
19   Q Okay. Now, let's turn back to the patent
20 specification. Does the patent specification itself,
21 in the patent document, did the inventors describe what
22 they understood or considered to be the state of the
23 art as of August 1994 when the application for their
24 patent was filed?
25   A Yes. They did describe that in the

Page 1374

1 background section of the specification. The first
2 section.
3   Q And what did they say with respect to the
4 state of the art as it existed in August of 1994?
5   A Well, for example, let me go back here, these
6 are the patents, and this is a call-up from the '683
7 patent right at the beginning of the background
8 section. What they say is essentially that there are a
9 number of known requisition/purchasing systems that
10 manage and process requisitions. And one of the
11 examples that they cite is Fisher Scientific's RIMS
12 system, which is Requisition Inventory Management
13 System.
14   Q What we are looking at is a call-out from the
15 very first column of the patent, second paragraph?
16   A Right. As you can see at the bottom of this
17 slide, it is Column 1, Lines 10 to 17. It is this
18 highlighted portion here, which is highlighted over
19 here.
20   Q And how do the inventors describe in this
21 patent, in the '683 patent, how did they describe the
22 prior art RIMS system?
23   A Well, there is not a very detailed
24 description of RIMS in this patent. However, they
25 incorporate by reference this other patent, which as

35 (Pages 1371 to 1374)

Page 1375

1 you can see is the '989 patent, which is a patent about
2 the RIMS system which is this prior art system.
3   Q   So in this patent they incorporate a
4 description of the RIMS system from an earlier patent?
5   A   That's correct.
6   Q   Have you examined that prior art RIMS patent?
7   A   Yes, I have.
8   Q   Have you prepared any graphics to illustrate
9 what in general the prior art RIMS system patents say?
10   MR. ROBERTSON: Object. The RIMS patent is
11 not disclosed in any of the three of Dr. Menasce's
12 reports I can assure you.
13   MR. DAY: It's incorporated by reference in
14 this. And this is simply a description of what's in
15 the patent.
16   THE COURT: Objection is sustained.
17 BY MR. DAY:
18   Q   To your knowledge, when was RIMS first
19 developed?
20   A   It was first developed, according to the
21 inventor's time line, in about 1989.
22   Q   Okay. And how did the inventors characterize
23 the Fisher RIMS system in the '683 patent?
24   A   Well, they -- well, I cannot show that. They
25 characterize the Fisher RIMS system as a system in

Page 1376

1 which you could have a computer and a customer service
2 representative at the customer site that sees how the
3 customer service entity would have this software
4 running on their local PC. And that local PC would
5 communicate with a host computer, typically a mainframe
6 running at the distributor, site. Which would be, for
7 example, Fisher. So this local system, the RIMS
8 system, running at a local PC would have the capability
9 of answering data for requisition.
10   Q   Do you have graphics based upon the
11 description of the RIMS system that's contained in the
12 '683 patent?
13   A   Yes, I do. Let me move to, I have to -- I
14 don't know why I'm not getting --
15   Q   You want to go the other way.
16   A   Back?
17   Q   Back.
18   A   No. You recall asking me about graphics for
19 the screens?
20   Q   No.
21   A   I'm sorry. I didn't understand your
22 question.
23   Q   Based on the description of the RIMS system
24 as contained in the '683 patent, do you have graphics
25 that illustrate what the inventors described, how they

Page 1377

1 described the RIMS system in the '683 patent?
2   A   Yes, I do. So, essentially, they describe
3 having a customer service representative assigned to
4 these different customer locations. And this customer
5 service representative will have a personal computer.
6 And this personal computer would be connected, as I
7 said before, to a host.
8   So here is, for example, a distributor such
9 as Fisher Scientific. And in that host computer you
10 have inventory databases, you would have pricing
11 databases and you would have a cross-reference table,
12 which we're going to go back to this table.
13   Q   What is the host computer?
14   A   Host computer is, in that case will be
15 typically a mainframe. It is a larger, much larger
16 than a personal computer, that can handle a very large
17 number of users at the same time. For example, an IBM
18 computer. Large IBM computer. That would be an
19 example of a host.
20   Q   Okay.
21   A   So, besides that, as I mentioned before,
22 there's this Fisher CSR at the customer site. And then
23 here we have the components or have RIMS running at the
24 local PC, RIMS being the requisition/purchasing
25 program. And it has a RIMS database. This RIMS

Page 1378

1 database contains requisition tables, customer
2 information and local inventory database.
3   Q   What do you mean by local inventory database?
4   A   What I mean by that is at the customer site
5 it will have two types of inventories. You can have
6 inventory that was owned by the customer and you can
7 have inventory that was owned by the distributor, but
8 was actually, physically at the customer's site.
9   So the basic idea is that if the customer
10 wanted to purchase something, the idea was that she
11 would first check the local inventory, and if the item
12 was unavailable at the local inventory, then it will be
13 ordered by the host database. You would check the host
14 database.
15   Q   Now, you stated that the inventors didn't
16 claim to be the first to describe a requisition and
17 purchasing system, right? We saw that that there were
18 known systems?
19   A   Yes. As an example, RIMS is an example of
20 that.
21   Q   And the RIMS system, what we see here
22 described in the patent, this was one of the prior art
23 requisitioning and purchasing systems they describe; is
24 that right?
25   A   That's correct.

Page 1405

```
 1
 2              IN THE UNITED STATES DISTRICT COURT
 2          FOR THE EASTERN DISTRICT OF VIRGINIA
 3                    RICHMOND DIVISION
 3
 4    ------------------------------------------
 4
 5    ePLUS, INC.,
 5
 6
 6                             Plaintiff;
 7
 7        v.                              CIVIL ACTION
 8                                        3:05CV281
 8    SAP AMERICA, INC., et al.
 9
 9
10                             Defendants.
10
11    ------------------------------------------
11                   JURY TRIAL - VOLUME IX
12
12                     April 11, 2006
13                    Richmond, Virginia
13                       9:30 a.m.
14
14
15    BEFORE:       HONORABLE JAMES R. SPENCER
15                  United States District Judge
16                       AND A JURY
16
17    APPEARANCES:  JENNIFER A. ALBERT, ESQ.
17                  THOMAS J. CAWLEY, ESQ.
18                  MAYA M. ECKSTEIN, ESQ.
18                  SCOTT L. ROBERTSON, ESQ.
19
19                             Counsel for Plaintiff;
20
20                  LLOYD R. DAY, JR., ESQ.
21                  ROBERT GALVIN, ESQ.
21                  DABNEY J. CARR, IV, ESQ.
22                  ROBERT A. ANGLE, ESQ.
22
23                             Counsel for Defendants.
23
24
24
25                      JEFFREY B. KULL
      25              OFFICIAL COURT REPORTER
```

Page 1534

1 result of that query. So what they decided to do is to
2 superimpose what they called the super index. So this
3 index is an index into all the .INF files. It will
4 say, well, if you are looking for a beaker, you only
5 need to look at these specific .INF files. And then
6 you can go into that .INF file and use that file's
7 index to find where beaker is located. So it is an
8 index that spans across all the indices. So that
9 really made the query run much, much faster and they
10 were able to solve the problem.
11 Q   Did the super index provide the inventors with a
12 way to search selected portions of the TV/2 database?
13 A   It did.
14 Q   How did it do that?
15 A   Well, because if you have, for example, a certain
16 keyword that only appears in a subset of the catalogs,
17 you would be then driven to those specific documents or
18 files and be searching only on those. You would not
19 need to search all of them.
20 Q   Was the existence or the use or the design of the
21 super index described by the inventors in their patent
22 specification?
23 A   No. It was never revealed, never mentioned.
24 Q   Let me turn to a different subject. I think we
25 are done with best mode for a moment. Let me turn to

Page 1535

1 the subject of written description. What in general is
2 your understanding of the patentees' duty to describe
3 their invention in the patent?
4 A   Well, in terms of what their invention is, they
5 have to provide an adequate description that would
6 provide a person of ordinary skill in the art the
7 understanding that the inventors really possessed the
8 invention that they are claiming in their patent.
9 Q   Now, in your opinion, does the '683 patent
10 specification adequately describe the inventions
11 claimed in the '683 patent?
12 A   No, it does not.
13 Q   In particular, what '683 claim limitation or
14 combination of limitations do you believe are not
15 adequately described in the patent?
16 A   Well, there are limitations that talk about being
17 able to search catalogs and transfer information from
18 those catalogs into a requisition/purchasing program.
19 And the how, how this transfer is done, how this
20 interaction occurs between TV/2 and RIMS, that is not
21 adequately specified.
22 Q   Okay. What is it that, in particular, with
23 respect to this transfer of information between these
24 two programs, do you believe one of ordinary skill in
25 the art would find to be missing, lacking, that they

Page 1536

1 would need to see, not want, but need to see in order
2 to satisfy themselves that the inventors actually
3 possessed the ability to transfer information back and
4 forth between these two applications?
5 A   Well, as we can see, TV/2 has to transfer
6 information to RIMS. And it is important, first of
7 all, because these two programs typically would have
8 different data formats, which means different syntax
9 and different semantics, different ways of assigning
10 meaning to data. It is important that TV/2 and RIMS
11 can understand each other in terms of the syntax and
12 the semantics.
13 Q   Would you please show the jury, I see we have a
14 picture up here, but if you could go back one, please.
15 Just show the jury where this interface that we are
16 talking about was located in the system and what it
17 did.
18 A   Okay. So here we have TV/2 and we have a shell
19 program, which essentially builds this order list out
20 of the results of a search. And then what it does, it
21 uses this interface that we discussed yesterday to send
22 information to RIMS. Now, this interface, the way it
23 is described, it is a mechanism to transfer data; in
24 other words, to transfer bits from one program to the
25 other. The important issue that I'm going to be

Page 1537

1 illustrating in a moment is that what is the meaning of
2 the data; in other words, what's the meaning of the
3 bits, of the zeros and ones being transferred from one
4 program to the other.
5 Q   Before we get to that, however, the patent
6 describes a particular protocol, an inner process
7 protocol on the OS/2 operating system that's used to
8 transfer information between these two applications.
9 And what's that called?
10 A   DDE, Dynamic Data Exchange. DDE. That's the
11 protocol that comes with the Windows and IBM OS/2
12 operating systems.
13 Q   We talked about that a little bit yesterday. I
14 don't want to go into great detail again today, but I
15 do want to know, does the patent describe any protocol
16 other than DDE to communicate information between the
17 requisition/purchasing program and the catalog search
18 program?
19 A   No, it does not.
20 Q   And can two programs operating on two separate
21 computers communicate with one another using DDE?
22 A   No, they can't. DDE is a specific communication
23 protocol for two programs running on the same machine.
24 They have to be on the same machine to use DDE.
25 Q   Okay. So putting DDE aside for a moment, does the

34 (Pages 1534 to 1537)

Page 1558

1 A   No. And I can explain why. I have some graphics
2 that illustrate that. So we went over, you had this
3 local computer, local environment with these two
4 programs which communicate over DDE, and there is no
5 interface description in terms of the syntax and
6 semantics. If you were to have a distributed network
7 environment, then you would need to know what is the
8 type of pipe or, let's say, communication mechanism
9 that would have to be used. There is no disclosure of
10 that. But moreover, and more importantly, there is no
11 disclosure of what would be the type of interface
12 between these two programs if they were to run on
13 different machines.
14   Now, there is another important issue that I would
15 like to bring up. The patent describes connection
16 between the local computer and the host, which would be
17 the Fisher mainframe. And they refer to SNA, which is
18 an IBM proprietary set of networking protocols which
19 stand for System Network Architecture. So even if you
20 were to use SNA as the pipe, as the mechanism to
21 connect RIMS and TV/2, there is still no adequate
22 description of what would be this translation
23 mechanism, this interface.
24 Q   Okay. You mentioned that SNA is referred to. And
25 how many times is it referred to in the patent?

Page 1559

1 A   Once. SNA is only referenced once in the patent.
2 Q   In what context is it referred to?
3 A   It is referred to in the context of a
4 point-to-point connection between the local computer
5 and the host.
6 Q   What is the significance of its reference to a
7 point-to-point connection? To one skilled in the art,
8 what does that mean and what's its significance?
9 A   A point-to-point connection means it is a
10 connection between one computer and the other. It is
11 not a distributed network. In a distributed network,
12 one computer can talk to any other. And
13 point-to-point, one computer can only talk to another
14 computer.
15 Q   So one other specific computer.
16 A   To one other specific computer. Right. So which
17 in this case, in the case of the patent specification,
18 would be the local computer talking to Fisher's
19 mainframe.
20 Q   All right. In your opinion, is the single mention
21 of SNA in the context of a point-to-point connection
22 sufficient to describe an interface between a catalog
23 search program and the requisition/purchasing program
24 connected over a network?
25 A   No, it is not.

Page 1560

1 Q   Why not?
2 A   Well, let me tell you why this is not sufficient.
3 First of all, we have seen at the top, this is our
4 local computer environment where we have DDE as the
5 mechanism for these two programs running on the same
6 computer to talk, but still no interface description.
7 Then we have the possibility of using SNA. If you were
8 to use SNA to connect these two computers, you still
9 don't have a proper description of this interface.
10 Now, this is what I think is missing. This is what I
11 think is not described if you were to have these two
12 programs running in different computers connected over,
13 let's say, the Internet and the Worldwide Web. And
14 this is SAP's SRM Solution to this problem. This would
15 be the SRM server, which is the way of building a
16 requisition, and this would be an external catalog, a
17 punch-out catalog. It would be Dell. And we saw the
18 demonstration by Dr. Weaver in which he punched out to
19 an external catalog. And as he described, SAP's SRM
20 invented this OCI, which is this Open Catalog
21 Interface, which is publicly available. It is a
22 description which is publicly available, which
23 essentially tells you that, well, if I want to go to an
24 external catalog, how should I request that catalog to
25 search for something. And when that catalog returns or

Page 1561

1 finds something, then what is the format and what is
2 the semantics by which this side, external catalog, can
3 return information to this other computer. So that is
4 missing.
5 Q   Does the Open Catalog Interface specify the syntax
6 and the semantics for exchanging information between
7 autonomous distributed systems over a network?
8 A   That's correct. So Dell is an autonomous site.
9 The SRM server is running at SAP's customer site.
10 These are two autonomous entities, but as long as they
11 comply with this standard, with this Open Catalog
12 Interface standard, they can talk to each other and
13 they can understand each other.
14 Q   Is there any description in the patents of an
15 interface such as OCI that could be used to effectuate
16 communication between two autonomous computers
17 communicating over the Internet and exchanging
18 information between a catalog search program running on
19 one computer and a catalog hosted on another computer?
20 A   No. There is no such description.
21 Q   Dr. Menasce, I'd like to turn to the issue of
22 infringement.
23   MR. DAY: Perhaps the Court would like to
24 take a break.
25   THE COURT: Yes. Let's take a break here.

Page 1618

1 you were to apply the Court's claim construction?
2   A   Yes.
3   Q   And the claims govern the scope of the
4 invention; isn't that right?
5   A   That's correct.
6   Q   And if you could, for one second, last
7 question I have with respect to the patent application,
8 it is page one again, you use this term in your patent
9 application, I just want to focus on it for one second,
10 that was right in the first paragraph, 0001, you
11 incorporate by reference another document. You see
12 that?
13   A   Yes.
14   Q   You understand that by incorporating that by
15 incorporating by reference, you incorporate everything
16 that was in that document as if it is fully set forth
17 in this patent application, right?
18   A   Well, I understand that -- I don't understand
19 the precise meaning of incorporating by reference in
20 terms of the legal aspect of that. I understand there
21 is, there are very particular legal meanings. But,
22 what that means is that we have filed for provisional
23 application. And this is saying that this is a
24 contemplation of that. I cannot answer questions of
25 the legal meaning of incorporated.

Page 1619

1   Q   You put in that document and you reference
2 the patent office to another document that you said I'm
3 incorporating in here by reference, right?
4   A   Well, I have to tell you that this was
5 written by the patent attorney. So --
6   Q   Well, do you think the patent attorney wanted
7 to reference this in the very first paragraph so they
8 would understand that there is this other document you
9 need to go look at?
10   A   Yes.
11   Q   If we could go to Menasce 8, please, from
12 your presentation. This was one of the slides that you
13 used in your direct examination. And you're referring
14 here and calling out from the first column of the '683
15 paragraph the fact that the inventors have also
16 incorporated by reference another patent, this Fisher
17 RIMS patent. That there were, in fact, two of the
18 inventors of the '683 and '516 were named inventors on
19 this patent, right?
20   A   That's correct.
21   Q   You didn't render any opinions with respect
22 to what's contained in this '989 Fisher RIMS patent,
23 right?
24   A   Well, my opinion --
25   Q   My question is, it is not anywhere in your

Page 1620

1 report, is it?
2   A   No. It is not anywhere in my report that I
3 can remember.
4   Q   You didn't offer any opinions on it today or
5 yesterday in your direct examination, right?
6   A   On the particular patent?
7   Q   Yes.
8   A   Well, I offered them an opinion on the system
9 that is --
10   Q   My question is directed only to the patent.
11   A   No.
12   Q   Now, at Column 4, if we could go to this
13 patent for a second, starting at about Line 5 going
14 down to Line 9, right off the get-go, the inventors are
15 saying preferably, but not necessarily, the Technical
16 Viewer 2 search program TV/2 available from IBM is used
17 as search program 50. You see that?
18   A   I see that.
19   Q   Okay. So right away they are saying the
20 search program from IBM called TV/2 -- and you're aware
21 that search program is referenced more than 40 times
22 throughout this document, right?
23   A   Yes.
24   Q   And you're aware also, sir, that on the face
25 face of the patent there is also a general

Page 1621

1 informational manual that was disclosed to the patent
2 office that the jury has seen and has features and
3 descriptions?
4   A   That's correct.
5   Q   And also a product information brochure?
6   A   Yes.
7   Q   You said you were aware of Ms. Eng's
8 testimony?
9   A   I was not here.
10   Q   But, I thought I understand you to say you
11 had read it, sir?
12   A   Yes.
13   Q   And you understood Ms. Eng testified under
14 oath that in the 1994 time frame there were many search
15 engines that were available that could do what the TV/2
16 search engine did, right?
17   A   Yes.
18   Q   Were you aware the inventors had, in fact,
19 sort of surveyed the horizon to look and see if there
20 were any search engines that might suit their needs?
21   A   Yes.
22   Q   And identified a few, including the TV/2?
23   A   Well, that's, I believe the TV/2; since it is
24 the only one referenced, they may have thought this the
25 best one to practice their invention.

Page 1622

1   Q   They may have. You actually don't know that
2   for a fact. Sir, isn't the best mode based on the
3   subjective view of the inventor, and by subjective,
4   isn't that what we understand to be known to the
5   inventors, not to somebody else, that's what subjective
6   means?
7   A   Well, I can't recollect exactly. But, I
8   think that one of the inventors testified that TV/2,
9   after they did the search, the TV/2 was the one they
10 thought would be more appropriate. But, I can't
11 really, you know, point you to a specific point in that
12 testimony. But, I have that impression that they
13 really selected TV/2 because they thought it was the
14 best one.
15   Q   Were you aware that one of the inventors
16 testified here that they also identified a search
17 engine from a company known as Verity, but that he
18 chose IBM because he was concerned about the financial
19 well-being of Verity as opposed to the financial
20 well-being of IBM?
21   A   I remember that.
22   Q   So he made his decision based not on the
23 features or functionality of the search engine, but
24 with respect to whether or not the company was going to
25 be around such that, you know, , he might be able to

Page 1623

1   rely on them to be there over the long term?
2   MR. DAY: Object. Misstates the testimony
3   in this case which the jury has heard.
4   THE COURT: Objection is overruled.
5   BY MR. ROBERTSON:
6   Q   Thank you. So he chose TV/2 because IBM in
7   his opinion was a more solvent company?
8   A   I remember reading that paragraph. I
9   honestly -- if you could show me the context, I'll be
10 more than happy to be give a more precise answer. But,
11 I do remember seeing mention to this other company.
12 And this concern about that company being around. But,
13 I don't remember the exact details of which this was
14 asked.
15   Q   Now, the Fisher RIMS system is also defined
16 as preferably, but not necessarily, isn't that right,
17 in the patent?
18   A   That's right.
19   Q   So again, right off the bat, we understand
20 that you don't necessarily have to have TV/2 to
21 accomplish the goals of this invention, you don't
22 necessarily have to have Fisher RIMS system, right?
23   A   Yes. That's correct.
24   Q   And so when we went through a lot of
25 demonstratives that you had prepared showing how Fisher

Page 1624

1   RIMS system has to interact with the TV/2 system, we
2   accept from the premise, from the beginning, that you
3   don't necessarily have to have Fisher RIMS because
4   that's just one preferred embodiment, you don't
5   necessarily have to have TV/2 and you don't necessarily
6   have to have all the things you say follows when you
7   use those two systems; isn't that right?
8   A   Well, that certainly makes the claims really
9   broad. But, if you're --
10   Q   If you accept my premise, the answer is yes,
11 right?
12   MR. DAY: Can he finish his answer, please?
13   THE COURT: Go ahead. Finish the answer.
14   A   What I'm saying is if you are not going to
15 certainly limit yourself to this preferred embodiment,
16 then your claims become extremely broad. And the
17 interpretation of those claims also being extremely
18 broad, you can also apply those broad claims to other
19 systems that were also known at that time that were
20 prior art.
21   Q   Understood. Now, with respect to the
22 background of the invention, you testified that the
23 inventors had identified what they understood to be
24 other known requisition/purchasing systems, correct?
25   A   Correct.

Page 1625

1   Q   And they also candidly disclosed that they
2   were aware of electronic catalogs, right?
3   A   They disclosed, yes.
4   Q   And they discussed, for example, EDI, didn't
5   they?
6   A   They mentioned EDI.
7   Q   Can you tell the jury what is EDI?
8   A   Electronic Data Interchange.
9   Q   That's a way of -- that's a communication
10 protocol, isn't it, sir?
11   A   Well, it is not just a communication
12 protocol. It is a way for companies to exchange
13 business documents like a purchase, requisitions.
14   Q   Purchase orders?
15   A   Purchase orders.
16   Q   Confirmation messages?
17   A   Right.
18   Q   That was well-known in 1994, wasn't it, as a
19 communication protocol and more from communication
20 documents, right?
21   A   It is a business exchange protocol.
22   Q   And that had been well-known for years prior
23 to 1994?
24   A   It was known prior to '94, yes.
25   Q   And that's one communication protocol that

56 (Pages 1622 to 1625)

Page 1626

1 the inventors called out that, and disclosed, and was
2 well-known to a person of ordinary skill in the art
3 that could be employed by this invention; isn't that
4 right?
5   A   It could be employed for the communication
6 within the requisition/purchasing system and the host.
7   Q   And, in fact, don't they say in the document
8 that in fact --
9   MR. DAY: Your Honor, if he would please just
10 let the witness finish his answer.
11   THE COURT: Don't interrupt the witness.
12   MR. ROBERTSON: Sorry, Your Honor.
13   THE WITNESS: What I was saying is that it
14 could be used for the exchange of purchase orders,
15 purchase requisitions between the local computer and
16 the host. However, when I was testifying about this
17 communication protocol and this interface, I was
18 alluding to the interface between a catalog search
19 program and the requisition program. And EDI would not
20 be appropriate for this type of purpose.
21 BY MR. ROBERTSON:
22   Q   Sir, you testified as to this person of, this
23 hypothetical construct, this perosn of ordinary skill
24 in the art. Do you recall that?
25   A   Yes.

Page 1627

1   Q   Okay. Now, there's only one specification
2 for the '683 patent, right?
3   A   Yes. There's only one.
4   Q   But, the '683 patent has two different types
5 of claims as you identified, method claims and system
6 claims, correct?
7   A   Correct.
8   Q   And I understood your testimony to be that
9 you had one person of ordinary skill in the art for the
10 electronic sourcing system claims and one person, and
11 another person of ordinary skill in the art for the
12 electronic sourcing method claims, correct?
13   A   That's correct. Yes. Different claims for
14 different inventions. And so the person of ordinary
15 skill in the art will be different in each case.
16   Q   But, the person using or practicing the
17 method is using electronic sourcing system, right?
18   A   The person using the electronic sourcing
19 system is using the methods.
20   Q   It is practicing the steps of the methods?
21   A   The methods, rights. The steps of the
22 methods.
23   Q   And the same specification that discloses how
24 to build a system that the user is going to use to
25 practice the method steps discloses how to use that

Page 1628

1 system, right?
2   A   Right. The same specification includes a
3 description of the method and embodiments of how to
4 practice the methods, but also describes the
5 implementation, if you will, of the system.
6   Q   But, if I'm going to be practicing those
7 steps of the method claim, I've got to have a system
8 that's been built for me, don't I?
9   A   Right.
10   Q   Okay. So I guess that's what I don't
11 understand. That if I have to have a system for a
12 system claim, and I have to have system for a method
13 claim, I don't understand how you draw the distinction
14 by saying there can be a lower level of skill for a
15 method claim if I have to make, use, build, enable a
16 system before I can use it.
17   A   Well, what I'm saying is that a person that's
18 going to follow the steps of the method claims, in
19 other words, using those business processes, could use
20 those business processes, for example, by using the
21 prior art system. So the person doesn't need to know
22 how to develop or implement the system, doesn't need to
23 know how to arrive at programs.
24   Q   He has to use a system that has been built.
25 And so someone needs to build that system for he or she

Page 1629

1 to use, right?
2   A   Absolutely. Someone has to build the system
3 and someone is going to use the system and they don't
4 have to be the same person. For example, the travel
5 agent that uses SABRE is not the same person who
6 programmed the SABRE programs and SABRE systems. They
7 are different people.
8   Q   The travel agent couldn't build a system that
9 he or she would have to use, could they?
10   A   Well, you wouldn't -- there could be someone
11 to program it is very unlikely. But, the travel agent
12 typically would not build systems. They would use the
13 systems.
14   Q   Did you have any authority for such a
15 proposition that you could have two different types of
16 person ordinary skilled in the art involved in one
17 patent as part of your independent research?
18   A   Well, I discussed this with the attorneys. I
19 wanted to understand the meaning of ordinary skill. I
20 had very lengthy conversations about what are method
21 claims, what are system claims. And if I recall
22 correctly, in your opening statement, you mentioned
23 that different claims are different inventions. So,
24 therefore, it seems very reasonable to me that if you
25 have different inventions, some inventions have to do

Page 1635

```
 1
 2              IN THE UNITED STATES DISTRICT COURT
 2             FOR THE EASTERN DISTRICT OF VIRGINIA
 3                      RICHMOND DIVISION
 3
 4    ---------------------------------------
 4
 5    ePLUS, INC.,
 5
 6
 6                              Plaintiff;
 7
 7         v.                              CIVIL ACTION
 8                                         3:05CV281
 8    SAP AMERICA, INC., et al.
 9
 9
10                              Defendants.
10
11    ---------------------------------------
11                  JURY TRIAL - VOLUME X
12
12                     April 12, 2006
13                    Richmond, Virginia
13                       9:30 a.m.
14
14
15    BEFORE:        HONORABLE JAMES R. SPENCER
15                   United States District Judge
16                        AND A JURY
16
17    APPEARANCES:   JENNIFER A. ALBERT, ESQ.
17                   THOMAS J. CAWLEY, ESQ.
18                   MAYA M. ECKSTEIN, ESQ.
18                   SCOTT L. ROBERTSON, ESQ.
19
19                           Counsel for Plaintiff;
20
20                   LLOYD R. DAY, JR., ESQ.
21                   ROBERT GALVIN, ESQ.
21                   DABNEY J. CARR, IV, ESQ.
22                   ROBERT A. ANGLE, ESQ.
22
23                           Counsel for Defendants.
23
24
24
25                   JEFFREY B. KULL
      25             OFFICIAL COURT REPORTER
```

Page 1652

1 Q   Thank you. And if a distributor is selling a
2 supplier a product, wouldn't a person of ordinary skill
3 understand that if I disclose checking the availability
4 of inventory from a distributor, it is pretty apparent
5 that I can also check the availability of inventory
6 from a supplier, correct?
7 A   No. That's not correct. Because first of all,
8 the specification, as I said in my testimony, does not
9 teach how to check availability at a supplier, an
10 external supplier inventory. For example, in order to
11 do that you would have to have some pre-established
12 agreement, some protocols that would allow you to do
13 that. In the case that we discussed here several times
14 of punching out, in the case of SABRE, in the case of
15 SRM, in order for you to be able to punch out and check
16 availability at an external catalog, you need an
17 agreement or an interface, like OCI, that would allow
18 you to actually connect to those systems. And I have
19 not seen any teaching in the specification that would
20 include such checking availabilities at external
21 suppliers except for the description.
22 Q   None of the claims say that there is -- expressly
23 recite an interface element, do they, sir?
24 A   No. The claims do not talk about it.
25 Q   Okay. Thank you. And it is your testimony that

Page 1653

1 the system that's disclosed here can go out and check a
2 distributor's inventory that includes supplier
3 products, but using the same methodology it couldn't go
4 out and check a supplier's?
5 A   Well, I'm going to repeat what I have just said.
6 The system is configured and designed to interact, have
7 interaction between the local computer and the
8 distributor. However, I have not seen any in any
9 specification that would tell me, that would teach a
10 person of ordinary skill in the art, how that
11 distributor would interact or punch out to external
12 suppliers.
13 Q   I'm not asking about punch-out right now. I'm
14 just saying that you can check the distributor's
15 inventory. You are telling me that's disclosed in the
16 patent. But you are saying using the same manner you
17 can't check the supplier's inventory; is that right?
18 A   That's right.
19 Q   Let's look at Column 18, if we could, in the '683
20 patent, starting at about Line 13. Going down, let's
21 go down to about Line 29, if we can. It says, The
22 distributor purchasing employee can then either forward
23 the information to the CSR, could forward it to the
24 customer end-user or the customer purchasing employee
25 who requested the item, to confirm that the requirement

Page 1654

1 is being met or contact the supplier to confirm pricing
2 and availabilities. Do you see that?
3 A   I do.
4 Q   And then in the first example, purchase orders
5 there, you can have a purchase order from the customer
6 to the supplier. Did I read that correctly?
7 A   An order from the customer to the supplier.
8 Right.
9 Q   Starting at about Paragraph 30, after we have
10 described all these ways about how to check inventory,
11 distributor inventory, and supplier pricing and
12 inventory, the patent states: From the foregoing
13 description, it should be apparent that the network
14 arrangements of Figure 1B -- and you talked about
15 Figure 1B, do you recall that?
16 A   Yes.
17 Q   That's the distributed architecture?
18 A   That's the network environment.
19 Q   The network environment. Thank you. It can be
20 used to apply the present invention in a variety of
21 contexts. Did I read that correctly?
22 A   Yes.
23 Q   The context will dictate which catalog databases
24 are provided on the file server 200. Correct?
25 A   That's correct.

Page 1655

1 Q   It goes on to say that can have distributor
2 catalogs present and it can have a number of outside
3 supplier catalogs to be increased. Do you see that?
4 A   Yes. This would be at the distributor.
5 Q   And why don't we take a look, sir, at Column 5, if
6 we could, for a second. Here we are discussing the
7 host computer. That's about Line 12. Go from 12 down
8 to about -- excuse me, Line 9, I'm sorry. Starting at
9 Line 9, go down to about Line 17. You discussed this
10 section a little bit yesterday. Do you recall that?
11 A   Yes, I do.
12 Q   The host computer, just refresh the jury, that can
13 be the distributor's computer?
14 A   Yes. Typically, the mainframe at the
15 distributor's site.
16 Q   That's where we are going to have the availability
17 of the inventory?
18 A   The inventory database and the pricing database
19 and the cross-reference table.
20 Q   And there, it says that they can be linked, the
21 host computer and someone who is at the local computer,
22 of course it says preferably again, so we know it is
23 just a preferred embodiment, they can be point-to-point
24 or they can be in a network employing the formats and
25 protocols of IBM's system network architecture or SNA.

Page 1656

1 Do you see that?
2 A Yes.
3 Q You understand that SNA was IBM's precursor analog
4 to an Internet protocol, correct?
5 A Well, I wouldn't say that. I wouldn't say that,
6 that IBM has a precursor to the Internet. The
7 precursor to the Internet was the ARPANET. The ARPANET
8 was developed with funding of the Department of Defense
9 and that was one of the first goals of the ARPANET, the
10 SNA, and that led to the Internet. It wasn't the SNA.
11 Q The SNA is the network communication protocol?
12 A An IBM proprietary network communication
13 protocol.
14 Q You didn't understand this was publicly available
15 in 1994?
16 A SNA was publicly available, yes.
17 @Q It also discusses that, about Line 14, I think,
18 the host computer preferably is a mainframe computer,
19 and it can run and operate both the operating system
20 and the applications on the Virtual Telecommunication
21 Access Method Communications Network. Did I read that
22 correctly?
23 A Yes.
24 Q That's a communication network that was available
25 to communicate between the distributor and the local

Page 1657

1 computer, correct?
2 A V-TEL is a module to control terminals on an IBM
3 MVS operating system.
4 Q It is a communications network, it says there,
5 doesn't it? Does it say communications network?
6 A Telecommunications access module.
7 Q A person of ordinary skill would understand that I
8 could use this VTAM network to also talk to a supplier;
9 is that right, if I can use it to talk to a
10 distributor?
11 A A person of ordinary skill in the art would
12 understand that you could pass bits to a supplier. It
13 is just a communication network, as I explained
14 yesterday. It is just a pipe that allows bits, zeros
15 and ones, to flow reliably from one point to another
16 point. But if you are asking me the question can you
17 talk to a supplier in a way that a supplier would
18 understand what you are telling the supplier, IBM SNA
19 will not do the job for you.
20 Q It does the job apparently in the patent to talk
21 to the distributor, passing these bits, right? So it
22 is your testimony it can talk to a distributor but it
23 couldn't possibly talk to a supplier?
24 A In that specific case, we are talking about a
25 system that Fisher RIMS designed. And Fisher had

Page 1658

1 control over the two ends. Fisher had control over the
2 local computer that was running RIMS, and they have
3 control over the distributor. So they knew exactly how
4 to interpret those bits that were going back and
5 forth. Even though that is not disclosed, but you can
6 understand that would work because they were in control
7 of the two pieces.
8 Q You talked a little bit about the Dynamic Data
9 Exchange, DDE.
10 A Yes, I did.
11 Q Just confirm for me if DDE is not recited in any
12 of the patent claims that are at issue here, correct?
13 A You are correct.
14 Q The Judge didn't interpret any of the claims to
15 require a DDE protocol, correct?
16 A That's correct.
17 Q And you also talked a lot about this local
18 computer that's described in the patent, and that's
19 specifically one of the embodiments disclosed in Figure
20 1A, correct?
21 A That's true.
22 Q None of the claims say that the programs that are
23 present need to be operating on a local computer, do
24 they?
25 A They don't mention local computer.

Page 1659

1 Q And the Judge, for example, if we could see the
2 key terms again, when the Judge defined what an
3 electronic sourcing system is, he said it is an
4 electronic system for use by a prospective buyer to
5 locate and find items to purchase from sources,
6 suppliers, or vendors. Correct?
7 A That's correct.
8 Q He didn't say, and that has to occur at a local
9 computer there, did he?
10 A He did not.
11 Q And did I understand you to say yesterday that the
12 claims do recite, several of the claims do recite a
13 database, or more specifically, I think, a catalog
14 database, correct?
15 A Some claims mention a database, yes.
16 Q And you indicated, I believe, that it was your
17 view that the patent could use any kind of database; is
18 that right?
19 A Well, it doesn't say the kind of database. The
20 claims don't specify the kind of database. That's
21 correct.
22 Q You went through at some length a description as
23 to how a relational database would function. But it
24 didn't have to be a relational database; is that what
25 you are saying?

7 (Pages 1656 to 1659)

```
 1
 2               IN THE UNITED STATES DISTRICT COURT
             FOR THE EASTERN DISTRICT OF VIRGINIA
 3                       RICHMOND DIVISION
 4    ---------------------------------------------
 5    ePLUS, INC.,
 6
                                   Plaintiff;
 7

        v.                                    CIVIL ACTION
 8                   .                         3:05CV281
      SAP AMERICA, INC., et al.
 9
10                                 Defendants.
11    ---------------------------------------------
                    JURY TRIAL - VOLUME XV
12
                        April 19, 2006
13                      Richmond, Virginia
                          9:50 a.m.
14
15    BEFORE:       HONORABLE JAMES R. SPENCER
                    United States District Judge
16                         AND A JURY
17    APPEARANCES:  JENNIFER A. ALBERT, ESQ.
                    THOMAS J. CAWLEY, ESQ.
18                  MAYA M. ECKSTEIN, ESQ.
                    SCOTT L. ROBERTSON, ESQ.
19
                                   Counsel for Plaintiff;
20
                    LLOYD R. DAY, JR., ESQ.
21                  ROBERT GALVIN, ESQ.
                    DABNEY J. CARR, IV, ESQ.
22                  ROBERT A. ANGLE, ESQ.
23                             Counsel for Defendants.
24
25                      JEFFREY B. KULL
                    OFFICIAL COURT REPORTER
```

Page 2720

1   engine that could be used to implement the electronic
2   sourcing system?
3   A   Yes. I know that when I spoke with the inventors,
4   they said that they had considered another search
5   engine, one that was made by a company called Verity.
6   They thought it was a good product. They thought they
7   might use it. But when they looked into the financial
8   condition of the company, they found that it was on
9   shaky financial ground. So they decided not to use it
10 for that purpose and instead went with the TV/2 search
11 engine from IBM since IBM was a big company on solid
12 financial footing.
13 Q   Was one of those inventors Mr. Kinross that you
14 discussed this with, who is sitting here in the
15 courtroom today?
16 A   Yes.
17 Q   Do the claims recite a TV/2 search engine, any of
18 the claims that have this search functionality, search
19 capability?
20 A   No. None of the claims mention TV/2 at all.
21 Q   Does the patent actually describe the TV/2 search
22 engine as one preferred embodiment but not a necessary
23 -- not necessarily the only embodiment?
24 A   Yes, that's exactly what it says.
25 Q   Do you have an understanding as to whether or not

Page 2721

1   the Patent Office when it reviews a patent application
2   has to make a determination whether or not it satisfies
3   the written description requirement?
4   A   Yes. That's part of the Patent Office procedure.
5   Q   You examined the Prosecution File Histories of the
6   patent, sir?
7   A   Yes, I did.
8   Q   Did you see anywhere in the Prosecution Histories
9   that the Examiner, when examining any of the claims of
10 the '683 patent or the '516 patent, rejected the claims
11 because they lacked an adequate written description?
12 A   The Examiner did not do that.
13 Q   Would a person of ordinary skill in the art, sir,
14 have an understanding that there were potentially other
15 requisition or purchasing programs that could have been
16 used to implement the electronic sourcing system of the
17 invention other than, for example, the RIMS system that
18 the inventors described?
19 A   Yes. In fact, there is a list of others in Column
20 1 of the '683 patent.
21 Q   The inventors acknowledged that there were known
22 requisitioning and purchase order systems that might be
23 implemented as part of the overall design of their
24 patent system?
25 A   That's right.

Page 2722

1   Q   Now, I'd like to specifically discuss if we could,
2   now, some of Dr. Menasce's opinions with respect to
3   this written description. And do you have an
4   understanding as to whether or not he said the written
5   description was satisfied or not satisfied?
6   A   His opinion was that the written description
7   requirement was not satisfied.
8   Q   And he is rendering this opinion some, what,
9   twelve years after the patents were first applied for?
10 A   Correct.
11 Q   Now, do you agree with his opinion, sir?
12 A   No.
13 Q   Let's talk first about this DDE protocol. Are you
14 aware of whether or not Dr. Menasce testified with
15 respect to the inventors' disclosure of this DDE
16 communications protocol or Dynamic Data Exchange?
17 A   Yes. The patent does describe DDE, Dynamic Data
18 Exchange, as a way of passing information between
19 software running on the same computer. And in reading
20 that, he formed the opinion that that was the only way
21 that the software could work; specifically, that the
22 requisition program and the Catalog Search Engine had
23 to be running on the same computer. That was his
24 opinion. I disagree with that.
25 Q   Is there an example in the patent where we are

Page 2723

1   looking at a local computer embodiment that could be
2   employing but not necessarily this DDE protocol?
3   A   Well, in Figure 1A, we see the example where all
4   of the software is running on the local computer. So
5   that's here. And so this is an example where the DDE
6   protocol would be in use, and would be used to transfer
7   information between the requisition program and the
8   TV/2 search module and the shell and back after the
9   search is complete. Figure 1B is an alternative in
10 which here sits the local computer, and the
11 requisitioning and purchasing program resides here, and
12 this is a front end using the Graphical User
13 Interface. The business logic runs over here on the
14 server. And these these two separate computers are
15 connected by a protocol that is not DDE.
16 Q   You said the business logic is operating on a
17 server. What did you mean by that, sir?
18 A   In this case, the business logic of the
19 Requisition Management program picks up user input from
20 the Graphical User Interface, but the actual generation
21 and maintenance of the purchase requisitions is done in
22 the server and stored over here in the complete
23 requisitions box.
24 Q   In Figure 1A, if we could go back to that for a
25 minute, sir, there is a host computer there and a

Page 2724

1   bi-directional arrow. Do you see that?
2   A   Yes.
3   Q   And what's your understanding as to what that host
4   computer is in Figure 1A?
5   A   That's the distributor's machine, typically a
6   large machine, a mainframe.
7   Q   Is the local computer -- it says has host
8   databases. What do those host databases include if it
9   is the distributor/vendor's computer?
10 A   On that would be the distributor's items inventory
11 and cross-reference tables and customer information.
12 Q   This bi-directional arrow we are seeing here, what
13 does that signify?
14 A   The fact that it is bi-directional means that
15 there is communications in both directions. So
16 requests from the local computer would flow upwards,
17 for example, an inventory request, and would be
18 processed by the host, and then when the answer has
19 been computed, it would be sent back down to the local
20 computer where it would be displayed to the user.
21 Q   Now, does that bi-directional communication
22 between the local computer and the distributor that has
23 the items and the inventory and can communicate back to
24 the local computer, is that a DDE?
25 A   No. It can't be. These are two completely

Page 2725

1   separate machines connected by a network, and DDE only
2   operates inside one machine, two programs inside one
3   machine. So this is a clear example of connecting two
4   machines and doing transaction processing between
5   them.
6   Q   Let's go back to Figure 1B if we can for a
7   minute. I understood you to say that this was a
8   network implementation of the electronic sourcing
9   invention?
10 A   It is described in the specification as a network
11 implementation.
12 Q   These diagrams, these examples, are we to
13 understand that this is the only way that this
14 embodiment can be arranged or this network can be
15 arranged?
16 A   No. They are just examples.
17 Q   Just like the embodiments that were described in
18 the specification, the claims aren't limited to the way
19 it is configured in these figures?
20 A   That's right. There is a discussion even with
21 something like the figure for 1-B, there is much
22 discussion in Column 17 and 18 about variations on this
23 theme of adding other computers on this link or
24 reconfiguring that server to make it work differently.
25 So even though there is just one Figure 1B, the

Page 2726

1   specification talks about variations on this theme.
2   Q   Dr. Menasce, when he testified, was asked by
3   counsel whether or not the server had a monitor,
4   keyboard, and a printer. And I understood you to say
5   that there could be some business logic, that is, an
6   application program operating on the server.
7   A   That's right.
8   Q   Would someone need a monitor, keyboard, and
9   printer to have that occurring?
10 A   Absolutely not. Servers are typically big
11 machines stuck in the basement in the dark and they are
12 not attended by humans. They don't have peripheral
13 devices like monitors and keyboards. All the
14 interactions with the server are electronic in nature.
15 They are not humans.
16 Q   Besides this DDE protocol we have been talking
17 about, are there other communication protocols
18 disclosed in the patent, sir?
19 A   Yes. In the '683, it discloses the preferable use
20 of the IBM SNA architecture. Systems Network
21 Architecture. It is a family of protocols invented by
22 IBM back in the 1970's that has continued to evolve for
23 20 years.
24 Q   Why don't we go to Column 5 if we could of the
25 '683 patent, beginning at about Line 8, down to about

Page 2727

1   Line 17.
2   A   Okay.
3   Q   What's the significance of this description in the
4   patent with respect to communication protocols, in your
5   opinion?
6   A   So that first sentence says: The host computer
7   and a local computer are preferably linked
8   point-to-point or in a network employing the formats
9   and protocols of IBM's System Network Architecture. So
10 this says that there is inherent to the description of
11 the preferred embodiments here the explicit use of the
12 IBM SNA architecture. So it is a general networked
13 system of computers. That means that it would be
14 unlimited as to how many computers are communicating
15 with each other, unlike a point-to-point system which
16 is just one computer talking to another computer.
17 Q   Now, in the course of rendering your opinions and
18 your preparation, your analysis, did you have occasion
19 to look at the inventors' prior patent, that is, what
20 we call the '989 or the RIMS patent?
21 A   Right. RIMS. That's the Requisition and
22 Inventory Management System, the '989 patent.
23 Q   And is the '989 patent specifically referenced in
24 these patents, the '683 and the '516?
25 A   In the '683, yes. In fact, it says that the '989

5 (Pages 2724 to 2727)

Page 2728

1   is incorporated by reference.
2   Q   Can we just quickly look at that. It's at Column
3   1 beginning about Line 12 going down to Line 16 or 17.
4   A   That's right. One such system is the Fisher
5   Scientific Requisition and Inventory Management System,
6   (Fisher RIMS), described U.S. Patent Number 5712989
7   filed April 2nd, 1993 and assigned to Fisher, the
8   disclosure of which is incorporated herein by
9   reference.
10   Q   Do you have an understanding as to what it means
11   when you incorporate a patent by reference in its
12   entirety in another patent?
13   A   Yes. It means that all of the disclosures in the
14   other patent, in this case, the '989, are being brought
15   forward as part of the context of the patent to which
16   they are incorporated, which in this case is the '683.
17   Q   So in analyzing this adequate written description
18   requirement, did you consider the disclosure of the
19   '989 patent for what it teaches about communication
20   protocols?
21   A   Absolutely.
22   Q   And did you discuss that in your expert report?
23   A   Yes.
24   Q   Now, are you aware that Dr. Menasce didn't
25   consider the '989 patent at all in any of the opinions

Page 2729

1   he rendered?
2   A   I didn't see any mention at all.
3   Q   Having reviewed his testimony, you are aware that
4   he didn't testify with respect to any disclosures
5   contained or any teachings contained in the '989
6   patent?
7   A   That's right. I read the trial transcript. There
8   is no mention of the '989 patent
9   Q   Can you tell us in your review of the '989 patent
10   what you found significant with respect to
11   communication protocols?
12   A   Yes. So in this SNA Systems Network Architecture,
13   there is a family of communications protocols. One of
14   those is called LU.6.2. And the unique capability
15   about LU.6.2 is that it is the enabler for any two
16   computers to talk with each other over a network. So
17   this was enabling for the RIMS patent, it is enabling
18   for the '683 patent. It is particularly significant to
19   Figure 1B that we showed a minute ago.
20   Q   And the '683 patent and the '516 patent, I think
21   you have indicated that they do discuss the RIMS
22   system; is that right?
23   A   Sure. The '989 is the RIMS system and the '683 is
24   talking about creating an electronic sourcing system of
25   which RIMS is one possible component.

Page 2730

1   Q   Could we take a look then, Dr. Weaver, at the '989
2   patent, which I believe is Plaintiff's Exhibit 116.
3   Can you direct us to any relevant portions of that
4   patent that's incorporated into both the patents that
5   are at issue here and tell us what significance you
6   find there.
7   A   We can start with Column 4, Line 7 to 11. Local
8   computer 40 also preferably includes a multi-protocol
9   adapter communications card or a similar communications
10   card capable of supporting the LU.6.2 communications
11   protocol available from IBM. So what this says is in
12   the local computer, and the same would be true of the
13   host and the server, one installs a piece of hardware
14   called the multi-protocol adapter card. It would be
15   able to speak several computer languages for
16   transmitting information. But the one that is being
17   used here is LU.6.2. This is continued lower down in
18   Column 4 in Lines 53 to 58.
19   Q   Okay. Can we go down there and take a look at
20   that?
21   A   Data is preferably exchanged between host computer
22   10 and local computer 40 using the LU.6.2
23   communications protocol. Using the LU.6.2
24   communications protocol local computer 40 can create a
25   block of data conforming to a predetermined format

Page 2731

1   which can be transmitted to host computer 10.
2   So the significance there is that, since this is a
3   bi-directional communications protocol, either the
4   local computer or the host can package up data and then
5   send it over the network, which could be telephones or
6   some Internet or Intranet, and exchange information to
7   do transaction processing between two physically
8   separate machines that are connected by way of the
9   network.
10   Q   Since this disclosure is incorporated by reference
11   in the '683 patent, what if any significance does that
12   have on your opinions as to whether or not the
13   inventors have described and disclosed an adequate
14   written description with respect to communication
15   protocols for two remote computers talking to each
16   other and exchanging data?
17   A   Right. Absolutely they have. And we see that in
18   both Figures 1A and 1B where we have -- both of those
19   cases, we have a local computer talking to a host. But
20   in Figure 1B, that server is also described in the
21   specification as being a local host, so that the
22   connection between local computer and server 200 is
23   likewise capable of operating over the LU.6.2
24   protocol.
25   Q   Can you tell us whether or not this LU.6.2

Page 2732

1 protocol as disclosed in the '989 patent would allow
2 any computer to talk to another computer over a
3 network?
4 A Anyone that was equipped with the
5 hardware-software package that implements LU.6.2, yes.
6 Q The Graphical User Interface that's on the local
7 computer, can that operate with LU.6.2 with the
8 business logic that you referenced executing on the
9 server computer to create and complete requisitions?
10 A Yes. The Graphical User Interface as a front end
11 to the requisition program would be running on the
12 local computer and then, using LU.6.2, could
13 communicate with the server where the requisitions are
14 actually created and stored.
15 Q Now, did you have discussion with any of the
16 inventors with respect to whether or not such a
17 communication protocol could exist in the network
18 environment?
19 A Yes. All three of them, in fact.
20 Q Okay. And is there anything, sir, in the '683
21 patent disclosure that confirms your understanding that
22 you could have the application or business logic
23 operating on the server and communicating with the
24 local computer?
25 A Yes. I think it is Column 17. Column 17, Line 19

Page 2733

1 to 21 -- 22.
2 Q Okay. What's the significance of this disclosure
3 in the '683 patent? We are back at the patents that
4 are at issue in this case. We are not in the '989
5 patent anymore.
6 A Right. These are the electronic sourcing system
7 patents. Server 200 maintains complete requisitions
8 242 in a manner similar to the manner in which local
9 computer 200 maintains requisition databases 42 --
10 sorry, that was local computer 20 -- maintains
11 requisition databases 42 in the embodiment shown in
12 Figure 1A. So this is drawing the distinction that
13 back in Figure 1A, the data processing and the data
14 storage was local on the local computer, Number 20 in
15 that diagram, whereas over in Figure 1B, the networked
16 embodiment, the creation and maintenance of these
17 purchase requisitions is being done in the server and
18 then stored in the completed requisitions file labeled
19 242.
20 Q There is some discussion in the patent that the
21 200 computer can be a File Server; is that right?
22 A Yes, there is. It is described as a File Server.
23 It is also described as an Application Server.
24 Q It indicates it could be a large personal
25 computer, a workstation, or a minicomputer such as an

Page 2734

1 IBM AS/400. Are you familiar with that?
2 A Yes.
3 Q Can you tell the jury what AS stands for?
4 A Application Server. It is a mid-level IBM
5 minicomputer.
6 Q Did Dr. Menasce make any argument that the server
7 needed to be confined to an AS/400 in any type of
8 future embodiment for the claims to cover that?
9 A No.
10 Q So at least with respect to this server, it is not
11 confined to technology that may have existed in 1994;
12 is that your understanding from Dr. Menasce's
13 testimony?
14 A Yes.
15 Q Can you tell me whether a person of ordinary skill
16 in the art at the time of the invention in 1994 would
17 have understood how to use this LU.6.2 communications
18 protocol?
19 A Yes. Absolutely.
20 Q Do you know when this communications protocol
21 became available and known?
22 A Early 1980's.
23 Q And do you have any documentation that you could
24 reference to that would explain for us an understanding
25 of this protocol as it existed in the late 1980's,

Page 2735

1 early 1990's?
2 A Yes. There is an Encyclopedia of Networking that
3 gives a concise description of major computer science
4 terms and products and tells a bit about what they do,
5 and in some cases, when they were created and by whom
6 and for what purpose.
7 Q Let's take a look at that, then. This is
8 Defendant's Exhibit 37. And this is Exhibit 1 in your
9 Tab notebook. It is the only one I'm going to refer
10 you to. Is this the Encyclopedia of Networking you
11 were discussing?
12 A Yes, it is.
13 Q If we could go to Page 3 of that. You have
14 certain excerpts out of this Encyclopedia of Networking
15 addressing this LU.6.2?
16 A Right. I just picked two out of this document.
17 Q Direct us to the paragraph of interest on this
18 page, sir.
19 A On Page 33, APPC, Advanced Program-To-Program
20 Communications, that whole -- the rest of that page is
21 talking about this, but I wanted to direct us to the
22 third paragraph.
23 Q That begins LU.6.2, the first paragraph where
24 that's shown, the first paragraph discussing that.
25 A So LU.6.2 was developed to allow computers on the

Page 2736

1 network with their own processing power to set up their
2 own sessions. A session is one of these bi-directional
3 transmissions that work from both sides of the
4 network. In the older hierarchical approach, terminals
5 attached to host computers relied completely on the
6 host to set up and maintain sessions. So that's old
7 technology and LU.6.2 is the remediation for that. LU
8 --
9 Q   Let me stop you there. You say remediation.
10 LU.6.2, is it solving that problem?
11 A   That's what I meant.
12 Q   Just to back you up a little bit, because I want
13 to understand sessions. I think you said the sessions
14 are occurring on both computers that are communicating
15 to each other?
16 A   Right.
17 Q   Tell us, can you explain what you mean by that?
18 A   Sure. When you have software running on one
19 machine and software running on another machine and
20 they want to exchange data with each other, they
21 establish what's called a session. And it is called
22 that because all of the information that is transiting
23 the network has to be identified with special numbers
24 to know which process in the receiving machine is to be
25 the receiver of this data. Likewise, the sessions are

Page 2737

1 numbered or labeled so that you can -- so that the
2 receiver can tell what piece of software in the
3 transmitting machine this information came from. So
4 the session then is this labeled connection between the
5 software in one machine and the software in another
6 machine. You can think of it as a channel, a
7 bi-directional channel.
8 Q   I interrupted you in discussing what this
9 Encyclopedia of Networking discloses with respect to
10 LU.
11 A   I think the rest of the paragraph is significant.
12 LU.6.2 provides peer-to-peer communications -- so
13 peer-to-peer means software program to software
14 program -- between systems other than hosts and allows
15 those systems to run distributed applications like file
16 sharing and remote access. The entire range of IBM
17 platforms is supported by LU.6.2, including LAN's,
18 desktop systems, and mainframes. So this goes back to
19 Figure 1B where we had a connection between the local
20 computer and the host, but also had a connection
21 between the local computer and the server. And this
22 paragraph is saying that LU.6.2 is the software
23 protocol that allows communication to occur
24 peer-to-peer, from software unit to software unit,
25 across two networked machines.

Page 2738

1 Q   And if we could go back to the title up there,
2 this APPC, because I think we will see that again.
3 That stood for Advanced Program-To-Program
4 Communications. Is that right?
5 A   That's right.
6 Q   Why don't we turn to the page that's, I think, 42
7 actually in the encyclopedia, but it is 6 of our
8 graphic or our exhibit. And can you direct us to
9 anything of significance on this page with respect to
10 this communication protocol?
11 A   Let me first discuss the first paragraph and then
12 let me explain the diagram, Figure A-6 above it. APPC,
13 that's the Advanced Program-To-Program Communications,
14 introduced in the early 1980's, APPC is also called
15 LU.6.2. It is the application interface for APPN,
16 which is Advanced Peer-To-Peer Networking. By
17 providing a way for applications on separate systems to
18 communicate without involving a host system, APPC
19 forged the way for APPN. It was the enabler for
20 peer-to-peer networking. It provided the shift away
21 from centralized mainframe control and allowed
22 programmable devices like computers to control their
23 own sessions.
24   Okay, so that paragraph tells us that APPC, the
25 Advanced Program-To-Program Communications, sits on top

Page 2739

1 of a network architecture called APPN, the Advanced
2 Peer-To-Peer Network, and is the enabler for software
3 on different machines to talk to each other. Up in the
4 Figure A-6 is the diagram that explains from an
5 Architectural point of view where these protocols fit.
6 Over here on the left-hand side is the seven layers of
7 the open systems interconnect model. That's not
8 important to this case, but it is a famous
9 organizational strategy developed back in the 1980's.
10 What's important is the way that there is -- that each
11 of these layers is repeated in these other two what we
12 call protocol stacks. In the middle sits APPN,
13 Advanced Peer-To-Peer Networking. So this is a
14 protocol stack. On top sits the application. So that
15 can be the catalog search; that can be the
16 requisition. Underneath it sits APPC, Advanced
17 Program-To-Program Communications. So an application
18 on one machine talks, in our terminology, you talk
19 downward through the stack to finally get to the actual
20 wire that carries the bits of conversation. So APPC,
21 which is LU.6.2, is the enabler for an application to
22 talk to another application. It does that by flowing
23 downward through path control, so that's routing
24 through the network, data link and physical and data
25 data link provides some degree of integrity on the

8 (Pages 2736 to 2739)

Page 2740

1   data. The physical is the actual bits on the wire. So
2   as information flows down here into the APPN, it is
3   then distributed over the network. The routing takes
4   it to the machine where it should go. The session
5   tells the receiving machine what piece of software
6   should be the receiver of this information. And now
7   when that information comes into the receiving machine,
8   it goes up the stack. So it goes backwards this way
9   and finally arrives at the application that's the
10 receiver. This is all bi-directional, so both machines
11 can talk to each other.
12   Over here on the right are the protocols of the
13 Internet. So we have applications and services that's
14 up in these top levels. What's called sessions in the
15 OSI reference model is enabled by LU.6.2 in the APPN
16 and by sockets. We computer scientists have lots of
17 terminology. So sockets is the session identifier. It
18 identifies what program in this destination machine you
19 are talking about. The path control and end-to-end
20 integrity are provided by two protocols that if you
21 have used the Internet you have heard of these, TCP,
22 Transmission Control Protocol and IP, Internet
23 Protocol. TCP provides ends-to-end reliability,
24 integrity. IP provides routing. Below it is the data
25 link that provides framing and below that is the

Page 2741

1   physical layer that does transmission and receiving of
2   the bits. Now, the whole point of that is that APPN is
3   IBM's version of the Internet protocol stack. It works
4   like the Internet works.
5   Q   Thank you. Would a person of ordinary skill in
6   the art at the time, in 1994, understand that the
7   LU.6.2 operated consistently in this fashion as is
8   explained in this exhibit, which I believe is the
9   Encyclopedia of Networking?
10 A   Yes, he would. The APPC was introduced in the
11 early 1980's, the APPN was introduced in 1985. So all
12 of this was known at least nine years before the patent
13 application was filed.
14 Q   You relied on this document in part for your
15 understanding that it was available at least since the
16 early 1980's?
17 A   Yes.
18 Q   Okay. Did you have discussions with the inventors
19 with respect to their understanding of this protocol
20 and its uses?
21 A   Yes. Their understanding is consistent with
22 mine.
23 Q   And so would a person of ordinary skill in the art
24 then understand that this protocol could be used to
25 communicate between the server computer and the local

Page 2742

1   computer in the embodiments described in the patent?
2   A   Absolutely.
3   Q   Let me direct you, if I could, back to the patent
4   again, the '683 patent, Column 18. And I'd like you to
5   tell us whether or not there is anything of
6   significance we should be looking at here with respect
7   to these communication protocols.
8   A   Yes. If we start in Column 18 at Line 30, we see
9   in that first sentence: From the foregoing
10 description, it should be apparent that the network
11 arrangements of Figure 1B can be used to apply the
12 present invention in a variety of contexts. The rest
13 of this text goes on to give examples of that context.
14 Examples that are here are there are many, many local
15 computers talking to the distributor host; that there
16 are many local computers talking to a server; that the
17 server is in fact buttressed by being a larger-scale
18 computer like that AS/400; and it is connected to many,
19 many local computers. And so the point of that is that
20 there are many simultaneous users. There's more if you
21 want to hear it.
22 Q   Sure. I would be happy to.
23 A   Okay. Skipping down to Line 42, in the middle
24 there: The operating environment (regional CSR site,
25 on-site CSR, on-site CSR networked with customer

Page 2743

1   end-users -- so these are networks of people on
2   separate machines talking to each other over the
3   network -- let's see, networked with customer end-users
4   and with purchaser personnel or distributor purchasing
5   site) will also affect the catalog databases included,
6   the File Server size, and the requisition/purchasing
7   program 240 used.
8   Well, the significance of that is that that box in
9   Figure 1B called the server would grow and shrink in
10 size depending on how many simultaneous users are
11 trying to access the business logic that is stored on
12 there. And then finally, just a bit below that at Line
13 47: In some situations, for example purchasing, each
14 client computer has an independent copy of
15 requisition/purchasing program 240; in others, for
16 example, on-site CSR, a single copy of the
17 requisition/purchasing program 240 is maintained with
18 associated local databases on the server 200.
19   So the significance of that is that depending on
20 which of these contexts is being used with the Figure
21 1B networked architecture, it may be that there are
22 many local computers and they download their own copy
23 of the requisition program, or, it may be that there is
24 a single copy of the requisition program, and this
25 would be the business logic portion of that resident on